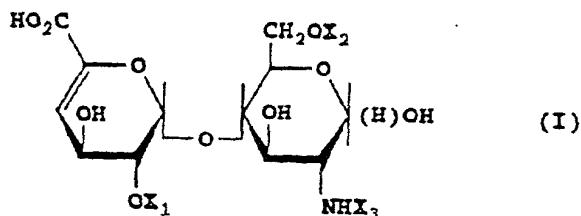


WHAT IS CLAIMED IS:

1. A method for treating a malignancy in a subject, comprising administering a pharmaceutically effective amount of a therapeutic agent to the subject, said therapeutic agent comprising an oligosaccharide, wherein said oligosaccharide is heparin or heparan-sulfate derived.
2. The method of claim 1, wherein said oligosaccharide is at least one of carboxylated and sulfated.
3. The method of claim 2, wherein said oligosaccharide is a glucosamine derivative and pharmaceutically acceptable salts thereof.
4. The method of claim 3, wherein said derivative is sulfated.
5. The method of claim 4, wherein said oligosaccharide is an N-sulfated 4-deoxy-4-en-iduronoglcucosamine having at least one other sulfate group and pharmaceutically acceptable salts thereof.
6. The method of claim 4, wherein said oligosaccharide is an N-acetylated 4-deoxy-4-en-iduronoglcucosamine having at least two sulfate groups and pharmaceutically acceptable salts thereof.
7. The method of claim 4, wherein said oligosaccharide is a

disaccharide of formula (I) or its pharmaceutically acceptable salt:



in which  $X_1$  is hydrogen or sulfate;  $X_2$  is hydrogen or sulfate; and  $X_3$  is sulfate or acetyl, provided that if  $X_3$  is sulfate, then at least one of  $X_1$  or  $X_2$  is sulfate and if  $X_3$  is acetyl, then both  $X_1$  and  $X_2$  are sulfates.

7. The method of claim 4, wherein said oligosaccharide is an N-sulfated 4-deoxy-4-en-glucuronoglucosamine having at least one other sulfate group or a pharmaceutically acceptable salt thereof.

8. The method of claim 4, wherein said oligosaccharide is an N-acetylated 4-deoxy-4-en-glucuronoglucosamine having at least two other sulfate groups or a pharmaceutically acceptable salt thereof.

9. The method of claim 1, wherein said oligosaccharide is a sulfated disaccharide.

10. The method of claim 1, wherein said oligosaccharide comprises at least one of DS Po912, DS 1145, DS 1020, DS 8767, DS Po821, DS 9267, DS 9517 and DS 0895.

11. The method of claim 10, wherein said oligosaccharide comprises DS Po912.

12. The method of claim 10, wherein said oligosaccharide is DS 1145.

13. The method of claim 1, wherein the malignancy is a metastatic tumor.

14. The method of claim 13, wherein said metastatic tumor is selected from the group consisting of breast cancer, lung cancer, bone cancer, bladder cancer, rhabdomyosarcoma, angiosarcoma, adenocarcinoma, prostate cancer, colon cancer, squamous cell carcinoma of the cervix, ovarian cancer, malignant fibrous histiocytoma, skin cancer, leiomyosarcoma, astrocytoma, glioma and hepatocellular carcinoma.

15. The method of claim 14, wherein the malignancy is lung cancer.

16. The method of claim 1, wherein said oligosaccharide is administered

in an amount in a range of from about 1 to about 1000 micrograms of oligosaccharide per Kg of subject, weight per weight.

17. A method for treating a metastatic cancer in a subject, comprising administering a pharmaceutically effective amount of a therapeutic agent to the subject, said therapeutic agent comprising an oligosaccharide, wherein said oligosaccharide is at least one of carboxylated and sulfated.

18. The method of claim 17, wherein said oligosaccharide is a glucosamine derivative and pharmaceutically acceptable salts thereof.

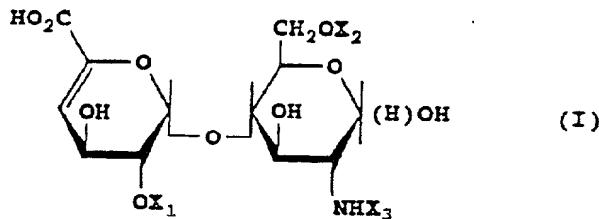
19. The method of claim 18, wherein said derivative is sulfated.

20. The method of claim 19, wherein said oligosaccharide is a sulfated disaccharide.

21. The method of claim 20, wherein said oligosaccharide is an N-sulfated 4-deoxy-4-en-iduronoglucosamine having at least one other sulfate group and pharmaceutically acceptable salts thereof.

22. The method of claim 20, wherein said oligosaccharide is an N-acetylated 4-deoxy-4-en-iduronoglucosamine having at least two sulfate groups and pharmaceutically acceptable salts thereof.

23. The method of claim 20, wherein said oligosaccharide is a disaccharide of formula (I) or its pharmaceutically acceptable salt:



in which  $X_1$  is hydrogen or sulfate;  $X_2$  is hydrogen or sulfate; and  $X_3$  is sulfate or acetyl, provided that if  $X_3$  is sulfate, then at least one of  $X_1$  or  $X_2$  is sulfate and if  $X_3$  is acetyl, then both  $X_1$  and  $X_2$  are sulfates.

24. The method of claim 20, wherein said oligosaccharide is an N-sulfated 4-deoxy-4-en-glucuronoglucosamine having at least one other sulfate group or a pharmaceutically acceptable salt thereof.

25. The method of claim 20, wherein said oligosaccharide is an N-acetylated 4-deoxy-4-en-glucuronoglucosamine having at least two other sulfate groups or a pharmaceutically acceptable salt thereof.

26. The method of claim 17, wherein said oligosaccharide comprises at

least one of DS Po912, DS 1145, DS 1020, DS 8767, DS Po821, DS 9267, DS 9517 and DS 0895.

27. The method of claim 26, wherein said oligosaccharide comprises DS Po912.

28. The method of claim 26, wherein said oligosaccharide is DS 1145.

29. The method of claim 17, wherein said oligosaccharide alters localization of tumor cells to treat the metastatic cancer.

30. The method of claim 17, wherein said oligosaccharide alters homing activity of tumor cells to treat the metastatic cancer.

31. The method of claim 17, wherein said oligosaccharide interferes with the CXCR4 7TM-GPCR signaling pathway.

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